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ABSTRACT

Funded in part by Elementary Secondary Education Act Title III funds and in part by the Atlanta, Georgia School System, Project Success Environment is now in Year Two of a three year program. A teaching technique of three components--a reinforcement system, a special classroom arrangement, and a success curriculum--the project premised that if inner city children can experience success rather than failure in the school environment, they will be able to accomplish more academically. In a Project Success Environment classroom, the teacher reinforces constantly and immediately after the desired behavior. A pattern is established so that children come to realize what behavior will be reinforced. The success Classroom includes a number of interest centers and a mastery center. For academic assignments, students are separated in three groups, according to academic ability, around the mastery center. In its format and content, the Success Curriculum material and its presentation allows for maximum reinforcement. This exemplary program has achieved improved academic performance, more positive learning behavior, changed techniques of teaching, and strategies for inservice training of teachers. (Author/JM)

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PROJECT SUCCESS ENVIRONMENT

(Atlanta, Georgia)

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Preface

In efforts at improving the quality of education and at justifying expenditures for compensatory education and school desegregation, we are increasingly dependent upon the data of evaluative research. Yet the data from many of these evaluation efforts conducted over the past twelve years are confused and inconclusive. The findings from these studies are sometimes contradictory. The interpretations have become the subject of considerable controversy, particularly as these findings and interpretations appear to contradict some of our cherished assumptions concerning education and educability. The lack of clarity with respect to the meaning of these data and the value of such programs is in part attributable to a variety of problems in the design and conduct of evaluative research. Among these problems, increasing attention is being called to the fact that there are sparse data concerning the specific nature of program interventions. These tend to be reported under labels or brief descriptions which provide little information relative to the nature and quality of the treatments to which the pupils studied are exposed. In an effort at gaining a better understanding of the content and nature of some of these programs, this project was directed at describing selected programs thought to be exemplary of quality, progress, trends or problems in compensatory education and school desegregation. Ten compensatory education programs and two school desegregation programs were selected for detailed description.

The principal procedures utilized in this study included documentary

analysis, direct observation of programs and interviews with selected informants. The tasks to be accomplished included identification and selection of projects to be studied, collection of all available data on each project considered, field study of promising candidate projects, preparation of descriptive reports, final selection and reporting.

Following is the description of one of these selected programs. For the complete report of this project see document number ED 099 458 in the ERIC system.

"Ignore and praise" is the creed that illuminates and inspires the classrooms of

Project Success Environment (Atlanta, Georgia).

Designed to

increase academic achievement of inner city children by
enabling them to experience success in the
school setting,
enhance their sense of accomplishment
develop confidence in self as learner

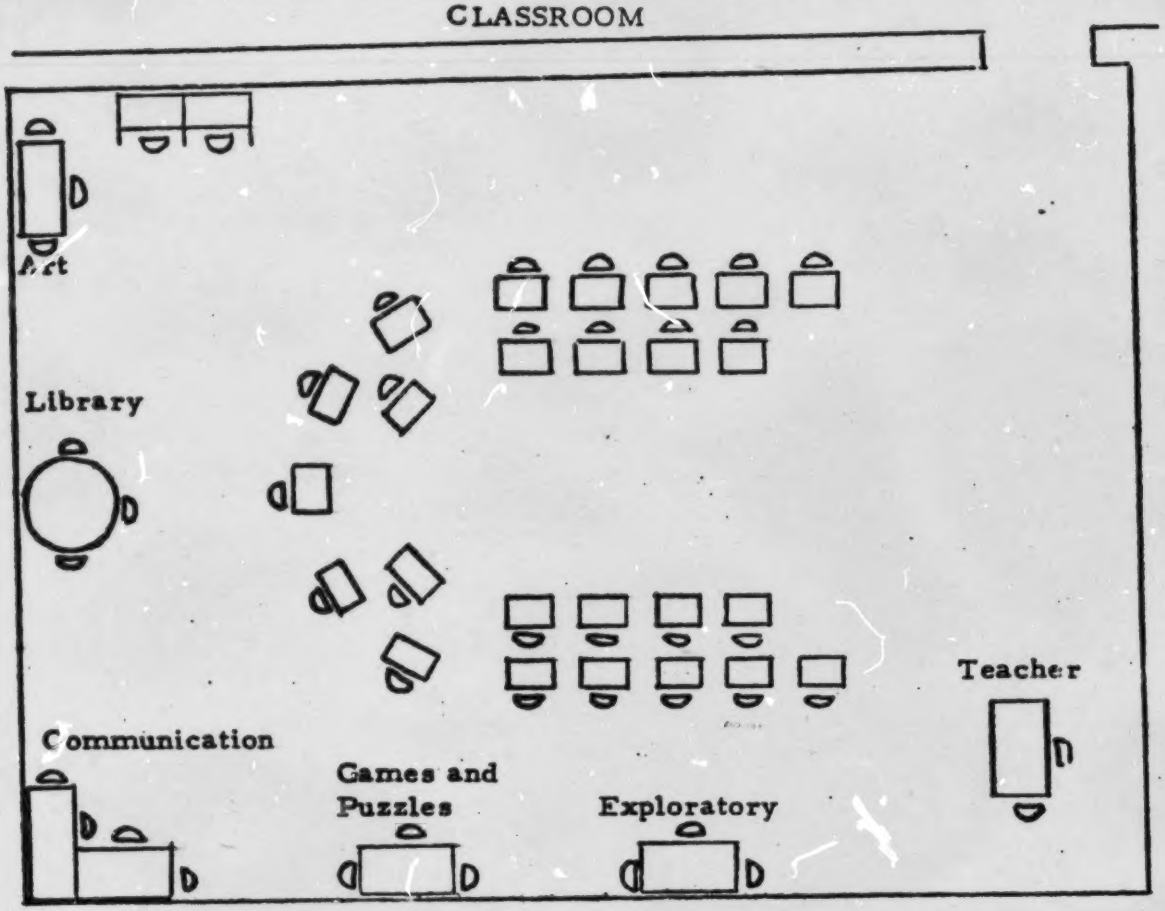
Through the use of

social and token reinforcement strategies
flexible use of classroom space
task oriented success curriculum
pupil focused interest centers

Project Success Environment has achieved

improved academic performance
more positive learning behavior
changed techniques of teaching
strategies for in-service training of teachers

FLOORPLAN OF A SUCCESS ENVIRONMENT CLASSROOM



This highly unorthodox classroom, the setting for Project Success Environment, greets the project obsever. For many of these inner city children, the traditional classroom has been the scene of humiliating experiences, an abattoir for their emotions and feelings. The drastic classroom alteration heightens the difference between their past school experience and this new, more positive one.

SUMMARY

Funded in part by ESEA-Title III funds and in part by the Atlanta, Georgia School System, Project Success Environment is now in Year II of a three-year program. A teaching technique of three components -- a reinforcement system, a special classroom arrangement, and a success curriculum, the project premised that, if inner city children can experience success rather than failure in the school environment, they will be able to accomplish more academically. The project aspires to effect positive behavioral changes in and subsequent academic progress by these children. For inner-city children Project Success Environment makes the adage "success breeds success" finally mean something. This program is exemplary because it has wrought significant positive behavioral changes in the pupils; positively affected the teaching experience of educators; yielded significant gains in academic performance; and can be easily replicated in other school systems. An now to Kipling's "six serving men -- what and why and when; how and where, and who" -- for the keys to Success Environment.

WHERE

The 400 children enrolled in Year II of the project live in East Atlanta, an urban area inhabited by approximately 13,000 of Atlanta's 502,500 citizens. (During Years I and II the program's racial composition was 100 percent black. Another school affiliated with the project in Year III; it is composed of 16 classes with 450 white students. It is projected that approximately eighty classes will be using the technique by the 1973-1974 school year). By all measures, Atlanta is one of the fastest growing and most progressive of Southern cities. However, like residents of other cities throughout the country, its inhabitants, particularly its poorer ones, encounter many urban generated and/or exacerbated problems. Near the downtown business district, East Atlanta is peopled by many families who emigrated from hard-core inner city neighborhoods. Although not inner city, East Atlanta is marked by many of the economic, social and educational problems that blight and disfigure the inner city: deteriorating housing (only 51.25% is classified as "sound", compared with the total city's 77.53%); high family mobility; a high delinquency rate; unpaved, poorly lighted streets; in adequate transportation; limited medical facilities and no drugstores; and insufficient recreation programs and community

services. East Atlanta's unemployment rate of 6.13 percent (503 of 8,225) exceeds the national average. Of those that are employed, many earn less than $3,000 per year.

There are five school districts in Atlanta; thirty-four schools are in District V, the site of the program. Faculty desegregation of Atlanta's schools has been in progress since 1969; blacks now compose about 53 percent of all elementary and secondary school faculty. Of the 16 teachers currently in the project, 13 are black; all of the paraprofessional aides are black.

WHEN

Project Success Environment was initiated by the Central City Board of Directors, in collaboration with principals, other administrative personnel, and the District V Superintendent in 1969. Then the planning staff of the Atlanta Board of Education worked with principals, the District superintendent, and the Assistant Superintendent for Instruction to refine the procedures. The noticeable and enthusiastic support for the program apparent at all administrative levels may be a result of the joint, cooperative planning that preceded the program.

During Year I of the Project (1970-1971), 150 students were included in experimental classes which utilized the technique; grades 1 through 3 in the elementary schools and grade 7 in the middle school participated. In Year II (1971-1972), now in progress, 400

pupils in grades 1 through 4 in the elementary schools and grades 6 and 8 in the middle school are enrolled in the experimental classes. To test the project's effectiveness, during both years comparison classes have been studied as well. Although many of the children are from the so-called "disadvantaged" segment of the population, there are also pupils whom the project characterizes as from "lower middle income families". In the elementary schools, the experimental classes were chosen at random, and there are children with different levels of ability in each class. In the middle school, students were grouped according to ability. The total number of classes, pupils, and teachers increased in Year II, but the number of paraprofessionals decreased. This decrease resulted from a desire to cut costs and to ascertain whether the classroom teacher could utilize the success technique without an assistant teacher.

WHAT

The project objectives are defined as follows:

1. To create, develop and test the success technique over a three year period. It is hypothesized that, at the end of the second year, the success technique will have proved to be effective and will be documented well enough to permit replication in other cities or schools.

2. To train project teachers and have them utilize the success technique. It is hypothesized that the ratio of reinforcement to punishment given by project teachers will be significantly higher than that by comparison class teachers. It is also hypothesized that, at the end of the year, project teachers will elect to teach utilizing the success technique over other styles or techniques.

3. To observe, record and evaluate behavioral changes that occur in project pupils who are exposed to the success technique. It is hypothesized that, by the end of the school year, the project pupils will show more academic improvement, be less disruptive, evidence more on-task involvement, exhibit more positive attitudes toward school, and have a better self-concept than will comparison pupils.

How are these objectives accomplished? Through application of three strategies, inextricably bound togehter in the teaching-learning process: the psychological principle of reinforcement; the physical rearrangement of traditional academic space; and the utilization of a curriculum which allows maximum reinforcement.

WHY

Inner city children frequently have no experience with success, little experience with praise. Tragically, whatever the feelings of support they have received at home -- and they are not as infrequent as many critics would have us believe -- many of the traditional practices of the public schools deflate their budding egos and diminish their implicit faith in themselves, their ability, and

their world. Defeat, despair, bitterness, resignation, defiance -- whatever adjective is chosen -- none augur hope, triumph, achievement. Like wind and sand on stone, the success technique erodes the wall of distrust and uncertainty; then, it helps to erect a new, equally impregnable wall bricked with accomplishment and mortared with confidence.

HOW

In a Project Success Environment classroom, the teacher reinforces constantly and immediately after the desired behavior. The Project Overview states:

> Reinforcement repeatedly gives the student an immediate sense of success and an accompanying positive feeling toward school in general and his own teacher in particular. If the reinforcements are administered properly, the student feels he has earned them and coped effectively with the environment. Finally, reinforcement provides direction and motivation for learning.

Reinforcement is not given haphazardly: a pattern is established so that children come to realize what behavior will be reinforced -- thus they know reinforcement is not chimerical, to be given at whim, and, as fancifully, withdrawn. Nor is it left to the individual teacher to decide what should be reinforced and when. Project teachers enter the success environment classroom with several "rules of thumb" culled from the work in reinforcement by Becker, Thomas, and Carnine:

1. Specify in a positive way the rules which are the basis for your reinforcement. Demonstrate the behaviors you desire by praising children who are good examples of following the rules. Rules are made important to children by providing reinforcement for following them. Keep the rules to five or less. As the child learns to follow the rules, repeat them less frequently, but continue to praise good classroom behavior.

2. Relate the children's performance to the rules. Be specific about the behavior children show which means "paying attention or working hard". "That's a good answer." "You listened closely to my question." That is called descriptive praise and is essential.

3. Catch the children being good. Reinforce behavior incompatible with that which you wish to eliminate.

4. Punishment will most likely be required when the unwanted behavior is very intense or very frequent.

5. If punishment is necessary, first try isolating the child. The child should remain in the time-out room until he is quiet for several minutes. Give one warning prior to the use of time-out so that the warning signal can be used most of the time as a punishment without the need for time-out. Any use of punishment should be accompanied by the use of reinforcement for behaviors incompatible with the punished ones.

A pat on the head is not enough. Fritos and toy watches, yo-yos and play money are the prizes, and check-marks and tickets, awarded for conduct or academic performance, are the only negotiable currency. Imagine you are a pupil, the veteran of one, maybe two years of regular classroom experience, inured to the slights and to the teachers' obvious resignation. Then, on the first day of school -- if you are fortunate enough to be in a Project Success Environment classroom -- you are given a reward just for being there! Although you are expected to follow certain behavior such as coming to school, sitting in seats, following instructions, paying

attention, you are rewarded when you do. In the first few weeks, as well as on the first day, candy is the reward. For the first six weeks, the emphasis on the reinforcement is on desirable conduct rather than on academic tasks. When reinforcement on conduct seems to be producing the desired behavior, reinforcement is transferred to academic achievement (although random reinforcement for conduct continues throughout the year).

As the year goes along, tokens gradually give way and praise becomes the major reward. During Year I, food as a token was eliminated after Christmas, much to the annoyance of the middle school students; as a result, in Year II, food and other tangible rewards were eliminated earlier. The intangilbe rewards (which are privileg rather than items) such as free time to go to an interest center, the playground, or the activity room in the middle school, or, in the elementary schools, to assist the teacher, have proven to be moderately successful. The excitement of the specially equipped activity rooms has been helpful here. Teachers distirbute at least a minimum number of academic and conduct tokens every day, with the ratio of conduct to academic tokens decreasing as the year progresses. Some tangile and intangilbe items that can be acquired in exchange for tokens are:

I. Tangible

A. Elementary
1. fritos and chips, candy
2. toy watches
3. play money
4. balloons
5. yo-yos
6. cars
7. rings

B. Middle
1. candy bars, chips and snacks
2. pencils
3. legal pads
4. yo-yos

II. Intangible

A. Elementary
1. free-time (most popular in the elementary schools were the interest stations and use of the sewing kit)
2. mini-teacher
3. plants and flower monitor
4. passing and collecting materials
5. room monitor
6. chalkboard and eraser monitor
7. report monitor
8. book monitor
9. TV and light monitor
10. time in the activity room

B. Middle
1. free time
   a. to go to interest stations
   b. to go to playground with teacher aide
   c. to go to the library
   d. to go to another teacher to complete unfinished work
   e. to observe the pets
   f. to spend time in the activity room

Praise and all its ramifications motivate and illuminate the program. Right answers are checked; wrong ones, ignored; at all times, a success environment teacher ignores and praises. During the second year of the program in Atlanta, the teachers are following a random reinforcement pattern. After the teacher has reinforced each pupil two or three times when new material or tasks have been introduced, the reinforcement will be given intermittently and unpredictably. In effect for the middle school classes in Year I, this pattern will now be applied to the elementary schools as well. The exception to this random reinforcement is the order task, defined as a "short direction-following task which stresses control and completion." Completion of the order task is always reinforced.

HOW THE SUCCESS CLASSROOM

The success environment enhances a child's sense of individual worth -- an effect difficult to achieve in the traditional teacher-class relationship; almost uniform reinforcement for everyone at the same time would be meaningless in a success environment classroom. The teacher must be able to work with individuals and small groups. Rows of desks and students (like so many eggs, or pegs) obviously would only diminish the individual pride that the program aspires to evoke. Hence, the unique classroom arrangement shown on page 2. This is

the second component of Project Success Environment, the Success Classroom. The classroom includes a number of interest centers and a mastery center. For academic assignments, students are separated in three groups, according to academic ability, around the mastery center. The composition of the group changes depending on whether reading, written language, or mathematics is in progress. At times, the groups are further subdivided. The interest centers represent another divergence from the traditional classroom. In the elementary schools, there are six interest centers. In the middle schools, the number and subjects of interest centers are more flexible and have been expanded, in part because grade 7 participants criticized the centers as irrelevant to teenage interests. A list of possible interest centers for both elementary and middle school follows:

1. ELEMENTARY SCHOOL - INTEREST CENTERS

   A. Communication

      1. Record Player - Records
         a. stories
         b. poetry
         c. songs
         d. language development - speech
         e. listening skills
         f. phonics
         g. mathematics

      2. Language Master
         a. alphabet
         b. phonics
         c. word - pictures
         d. phrases or sentences
         e. mathematics

3. Recorder with Cassettes
   a. stories
   b. poetry
   c. songs
   d. phonics
   e. vocabulary

4. E.D.L. Flash K
   a. alphabet
   b. word-picture
   c. mathematics

B. Academic Games and Puzzles

1. Language Arts or Mathematics
2. Commercial or Teacher Made

C. Art Activities (Direction following activities)

a. Language Arts
2. Mathematics
3. Social Science
4. Science

D. Order Tasks (Direction following activities): Language Arts or Mathematics

1. Ditto sheets
2. Workbook pages
3. Teacher made tasks
4. Tinker toy
5. Model building
6. Flannel board
7. Peg board
8. Lincoln logs

E. Library

1. Books
2. Magazines
3. Newspapers
4. Individual stories
5. Story box

F. Exploratory

1. Laboratory equipment
2. Aquarium

II. MIDDLE SCHOOL: POSSIBLE INTEREST CENTERS

A. Lnaguage Center

1. Story in a bottle
2. Story about a picture
3. Crossword puzzle

B. Science Center

1. Follow the directions to complete an experiment
2. Make a science dictionary related to a particular science subject area
3. What do you see with the magnifying glass or microscope?
4. Label a map of the universe or other scientific mock-up

C. Library Center

1. Read to each other
2. Make a book jacket
3. Organize room library into Dewey decimal system
4. Match the call number to the proper subject

D. Reading Activities (Aides)

1. Classifying skills
2. Sequence skills
3. Phonics skills

E. Geography Center

1. Map activities
2. Answer questions from task cards (answers are found in designated geography book)

F. Social Studies Center

1. Governmental structure (could start at classroom level)
2. Report on special events or holidays of the month

G. Art (Related to other acitvities)

1. Make a diorama of a book you have read
2. Make a book jacket of a book you have read
3. Make a cover for a social studies or science project you have completed

H. Job Card Center

1. Workbook sheets
2. See job card idea in primary bulletins

I. Music and/or Poetry Center

J. Listening Center

K. Viewing Center

L. Spelling Center

M. Math Center

1. Working with number stories
2. Words which mean the same
   a. minus, subtract
   b. add - (put together, sum)
   c. vocabulary done in word problems

N. Hobby Research Center

O. Newspaper Center

1. Classify news by areas (local, state, national, world)
1. Be familiar with the special sections of the newspaper
3. Locate the places on a map which the news article discusses

In Year I, project teachers spent over 80 percent of their time with individuals and groups. In the project classrooms, teachers utilize five treatment variables which are contingent upon a pupil's behavior: (1) social reinforcement; (2) token reinforcement; (3) withholding social reinforcement; (4) withholding token reinforcement; (5) social isolation. The teacher is constantly moving, working with one child or group. The individual work is based on instructions given at the beginning of class and to the group. When the teacher is working with one group, the others remain on task; inter-student talk appears to be about the subject of the interest center or the academic work at hand. When the teacher speaks in a normal voice to one child, nearly all the others pay no attention and keep working. This was especially true in the middle school. The teacher seems to be able to keep abreast of the activities and needs of students other than the one(s) she or he is working with. The children feel free to ask questions and appear to know that they will receive a response. The teachers seem to spend most of their time with children who are frustrated by the assignment.

HOW THE SUCCESS CURRICULUM

Reinforcement would be all for nough if the program lacked an academic curriculum. Since the ultimate goal of the program is increased academic accomplishment of project pupils, the curriculum material and its presentation are of primary importance. In its format and content, the curriculum material and its presentation are of primary importance. In its format and content, the curriculum material allows for;maximum reinforcement. The subject tasks are organized so that a pupil's achievement in an activity may be immediately praised, and thus reinforced. Full utilization of the technique demands a more detailed curriculum theory than presently exists. This year, Atlanta has hired two curriculum specialists at the program level to expand the success curriculum. In the Success Environment classroom, a reinforcing teacher and delighted, eager, confident pupils follow this schedule:

ELEMENTARY SCHOOL SCHEDULE

Time	Activity	Possible Check Marks and Criteria
8:30 A.M.	Morning Adjustment Collect lunch money	1: Coming on time 1: Picking up card and going to seat ready to work
8:45 A.M.	Flag salute Class rules	

Time	Activity	Possible Check Marks and Criteria
8:45 A.M.	Order	2 Check marks for order sheet 1: Starting 1: Following through
9:00A.M.	Language Arts 1	
	A. Skill Reading	4 Check marks for each activity
	B. Interest Stations	2: Effort
	C. Programmed Reading	2: Task
9:30 A.M.	A. Programmed Reading	4 Check marks for each activity
	B. Skill Reading	2: Effort
	C. Interest Station	2: Task
10:00 A.M.	A. Interest Stations	4 Check marks for each activity
	B. Programmed Reading	2: Effort
	C. Skill Reading	2: Task
10:30 A.M.	Mathematics I	4 Check marks for each activity
	A. Skills	2: Effort
	B. Problem Solving	2: Task
11:00 A.M.	Mathematics II	4 Check marks for each activity
	A. Problem Solving	2: Effort
	B. Skills	2: Task
11:30 A.M.	Lunch and Physical Ed.	4 Check marks 2: Going 2: Returning
12:30 P.M.	Language Arts II	4 Check marks for each activity
	A. Language Development	
	B. Programmed Reading	2: Effort
	C. Oral Reading	2: Task

1:00 P.M.	A. Oral Reading	4 Check marks for each activity
	B. Language Development	2: Effort
	C. Programmed Reading	2: Task
1:30 P.M.	A. Programmed Reading	4 Check marks for each activity
	B. Oral Reading	2: Effort
	C. Language Development	2: Task
2:00 P.M.	Spelling	4 Check Marks'
		2: Effort
		2: Task
2:30 P.M.	Social Science or Science	1: Random Reward

Note: The first grade class is dismissed at 2:00 P.M. The reading activities are 5 minutes shorter and the spelling activity is omitted.

MIDDLE SCHOOL SCHEDULE

Time	Activity	Possible Tickets and Criteria
8:15-8:30 A.M. Homeroom	Collect Lunch Money Check Attendance	1: Coming on time
8:30-11:30 A.M.		
READING	Order	3: Doing order task
	Group I - Skills	5-7: Distributed intermittently during the 15 minute period
SOCIAL STUDIES	Order	3: Doing order task
	Group I	5-7: Distributed intermittently during the 15 minute period
	Group II	
	Group III	

Time	Activity	Possible Tickets and Criteria
MATH & SCIENCE	Order Group I Group II Group III	3: Doing order task 5-7: Distributed intermittently during the 15 minute period
11:30-12:10 P.M.	Return to homeroom for Language Arts (Spelling, Writing, etc.)	
	Lunch	
12:10-12:40 P.M.	Lunch	
12:40-1:00 P.M.	Dictionary Skills - Adjustment for 1:00 Class - Exchange of Tickets for Rewards - Continue Language Arts	
1:00-2:00 P.M.	HEALTH	
	CONTEMPORARY ISSUES	
	READING	
2:00-3:00 P.M.	Planning	

Requisite for the project's effectiveness is the support of staff and community. The training of teachers to use the technique effectively and to elect to use it in preference to other techniques is one of the project's major objectives. Staff selection and training are crucial to the program's survival and ultimate accomplishments.

WHO PERSONNEL

The program includes a director, two coordinators, one research assistant, two part-time behavior technicians and two lead teachers. In Year II of the program two curriculum oriented lead

teachers were added to the staff. The Atlanta director is knowledgeable and enthusiastic about the program and the community. He and the staff appear to be accepted by the principals and teachers. In addition to the program level staff, there are teachers and paraprofessional aides. The ratio of teachers to pupils is approximately 1:25, with one paraprofessional aide for every two or three teachers. The criteria for teacher selection were flexibility and willingness to try the technique for a period of one year.

Teachers new to the project take a three-week summer training program. A fourth week consists of a curriculum workshop in which both new and experienced teachers participate. Currently, there is an on-going training program whereby experienced teachers train new teachers during the school year. It is reported that this method seems to be the most effective training procedure. The major text used for the summer program is Becker, Englemann and Thomas, Teaching A Course in Applied Psychology. In contrast to the training period prior to Year I, the more recent summer programs put greater emphasis on "actual practice in the classroom."

During the year, teachers meet with consultants; classes are frequently videotaped and replayed and discussed. Although teachers at the different schools are not scheduled to meet regularly, there

seems to be an "esprit de corps." The central staff, particularly coordinators, lead teachers, and technicians are frequently in the classrooms and are accepted as part of the ongoing program. Teachers appear free to disagree with the program staff.

Members of the community, aides enable the teacher to devote additional time to individualized and small group instruction. During the first year of the program, each teacher in Atlanta worked with an assistant teacher. To increase replicability by paring costs and to see if teachers were able to utilize the technique without additional classroom assistance, the number of paraprofessionals was decreased in Year II; one paraprofessional now works with two classes. In addition, the nature of the paraprofessionals' responsibilities was altered, an alteration reflected in the classification of "teacher aide", rather than "assistant teacher". The criteria for selection of teacher aides emphasize: membership in the community or a similar background; desire to work with disadvantaged pupils; desire to go into teaching as a career; appreciation for project goals and willingness to try the new technique. Nearly all the teacher aides are black and come from the community. Some of the thirteen aides do systematized in-classroom observation in each project class twice weekly. Notebooks are kept in the teachers' room containing charts on:

total reinforcement
tangible and non-tangible reinforcement

academic, conduct, non-contingent reinforcement
punishments
disruptions
percentage of involvement

The absence of an assistant teacher does not appear to have affected successful application of the technique and teachers contend that they are able to continue with the same level of effectiveness.

Support of parents and community would increase the effectiveness of the technique and extend its influence beyond the schools day. As in many programs in poverty areas, this project does not appear to have involved parents in the planning stages of the program. However, the researchers could find no indication that this situation was a deliberate strategy of the planners or the staff, nor did parents feel ignored or slighted. In fact, the program staff expressed a desire for increased parent-community involvement. In the instance of Atlanta, the southern tradition of non-involvement seems to be the main reason for the lack of participation. In other cities and states, a different pattern might emerge, particularly since many local, state, and national organizations are vociferously demanding intensified parent participation.

HOW COST

For Year I, project Success Environment was funded at $253,000; of this $180,000 was ESEA-Title III funds. The total included $132,000 for salaries, with $57,000 for paraprofessionals. In 1970-71, Year I, Atlanta spent $772 per pupil in its elementary schools. The change

from assistant teachers to teacher aides and the decrease in the proportion of paraprofessionals from one per class, to one for every two classes, was, in part, an economy measure. In Year II, the project was funded at $253,000 and it was projected that $28,000 of this would be returned to the state; Atlanta expects to spend $886 per elementary school pupil. The project cost per pupil has decreased to $396, arrived at by first deducting all the funds that relate to the research component. It is quite likely that Atlanta will assume funding of the program after the expiration of Title III, particularly since the costs are being pared and the program has evolved such enthusiasm from teachers, administration, and students.

EVALUATION RESULTS

The program's value must be examined on two levels: the results, as measured by Atlanta, and the effectiveness of the program as discussed by the director of this study.

To measure how effectively project teachers could learn the technique and how desirous they would be of using it, the staff used in-class observations of teacher behavior and anonymous surveys of teachers in the programs. In January 1972 the staff found that project teachers reinforced pupils significantly more often than the comparison teachers. In addition, they delivered less than a third of the number of punishments delivered by the control teachers.

Project teachers showed significant gains in times spent with small groups and individuals, relative to pretest observations; on the whole, they spent more time with groups and individuals than did comparison teachers. All the teachers in the group Year I elected to stay with the program for Year II. The staff also found that the new teachers (who entered the program in Year II) were "as effective as the more experienced teachers in the application of the technique." The staff and teachers feel that the quality of the individualized and small group instruction is maintained without the additional classroom help formerly provided by the assistant teacher.

To measure the behavioral changes that occured in pupils exposed to the success technique, the staff used an in-class observation technique twice weekly. Project students in both elementary and middle schools were on task significantly more often than the control students. Also, there was a significant difference in disruptive behavior between the project and control pupils across the 36-week 1971-1972 school year.

Convinced that increased attentiveness and diminished discipline problems should enhance learning ability, the staff measured academic achievement through the California Achievement Tests, by comparing pre and post-test scores in reading and mathematics.

The middle school classes (grades 6 and 8) made statistically significant gains in Reading Comprehension, Reading Vocabulary and Total Reading as compared to the control groups. In the second and third grades project pupils made significantly greater gains than the controls on Reading Vocabulary and Total Reading; though not significant, the project pupils made a greater average gain in Reading Comprehension. At the fourth grade level, the project pupils made greater average gains, though not statistically significant, on the Reading Comprehension and Total Reading subtests. Among the first grade students given the CAT at the end of the year, the project students showed significantly greater differences in all subtests; these differences were greater than at any other level. These data lead the project staff to conclude that gains may be made more easily at the lower grade levels where pupils are exposed to the success technique early in their educational careers. These conclusions are supported by the fact that the greatest difference in final reading level between project and control pupils occured at the second grade level.

For the middle school classes test results revealed a significant gain for the project students in Arithmetic Fundamentals and in Total Arithmetic; in Arithmetic Reasoning they showed a greater

average gain. Second and third grade project pupils made greater average gains on all subtests, though none were significant. At the fourth grade level the control pupils made slightly greater gains than project pupils on all arithmetic subtests. At the first grade level the project pupils made highly more significant test results than the controls on all arithmetic subtests.

As there had been some indication that the success technique elevated academic aptitude (IQ), the California Short-Form Test of Mental Maturity (CTMM) was administered to all project and control pupils in September, 1971 and in May, 1972. The project pupils at the third, fourth, and sixth grade levels achieved statistically significant gains in measured IQ over the controls while the difference at the eighth grade level approached significance. The most impressive change occured at the fourth grade level where project pupils gained almost fourteen IQ points. This outstanding performance may be accounted for by the fact that 81% of these project children had been in the program for two consecutive years. The pupils' average gain over the two-year period is 20 IQ points.

EFFECTIVENESS

Through the proper application of behavior analysis and contingency management, many specified behaviors can be established or extinguished. Those behaviors which are rewarded (reinforced) tend to be repeated; those behaviors which are not associated with or

followed by reward tend to drop out or are repeated with less frequency. Project Success has borrowed the contingency management half of this paradigm. By consistently rewarding appropriate pupil responses, the teacher manages the possibility that the reward will occur in such a fashion as to reinforce the response for which the reward is applied. The pupil derives a sense of success, and the response becomes fixed as part of the behavioral repertoire. The results of several studies utilizing what are commonly referred to as Skinnerian techniques suggest that Project Success should improve many of the academic skill areas and enhance a sense of accomplishment on the part of the pupils served. It is this author's impression that where simple behaviors can be specified, these techniques are highly effective in getting them established.

There are problems, however, in this project's very interesting application of reinforcement theory to the classroom. First, the behavior analysis aspect of the paradigm has not been utilized. Although the reinforcement strategies seem to have attracted the greatest attention from many who use Skinner's model, the behavior analysis may be the critical element. For it is as a result of careful analysis of the pupil's behavior that we discover how the reward is likely to function as reinforcement. Such analysis enable us to identify sources of intrinsic reward (considered to be even more powerful). It is through the analysis of behavior that we determine the more probable

behaviors that can be made contingent upon the target behavior which is the object of instruction. By neglecting this critical aspect of the paradigm, Project Success may have limited its effectiveness.

Second, despite the warmth, supportivenss and purpose apparent in this program (and these features are very important), the success curriculum needs greater specificity and modular development. If one is to reinforce consistently and effectively, the desired behaviors must be quite explicit. Although there seems to be the intention to make the curriculum task oriented, the project has not yet achieved this to any real degree. The learning task must be specific enough for pupil and teacher to identify easily the behavior upon which the reward is contingent. Otherwise, the reward is perceived as non-specific and may even be seen as false. A climate in which children perceive teachers as interested in their success and appreciative of their efforts has been achieved; however, the potential of the instructional model has not been realized.

In addition to these theoretical problems, the problem of teacher preparation must be examined. There appears to be the assumption that any teacher who is willing to use the success technique is acceptable. The appropriate application of the ideas upon which the project is based, and certainly those underlying the total paradigm, require more than interest and tenacity. Sensitive observation, a degree

of complusiveness, attention to details, self-discipline, unflappability, commitment to system and order would seem to be essential qualities for teachers in such a program. These characteristics together with more extensive training and follow-up supervision, are extremely important in a program such as this where specific teacher behaviors are so critical. Even in projects where there is more freedom for teacher error or variation, effectiveness is frequently reduced because of considerable slippage between the educational prescription and the delivery of the learning experience.

In this day of politicized education it is easy to understand why the active dissemination of information occurred only after the program's experimental stage was completed. Nonetheless, the lack of parental involvement in planning and in implementation is regrettable. While most parents do know their child is in a special program, few have more than a minimal knowledge of the program. No special efforts were made to recruit parents as teacher-aides or volunteers. The desire expressed by staff, principals and teachers for increased parent-community involvement requires active follow-up. However, despite the absence of a public information component, information on the effective way in which the program functions has been circulated. Other schools have been asking how and when they can initiate the success technique.

This enthusiasm that non-project school administrators and teachers have shown for initiating Project Success gives witness to a complementary blending of elements among the project, the participating schools and the central office. The school system, in encouraging the project to expand, has provided an atmosphere in which schools are eager to participate in, rather than forced to accept, the changes. Thus, Project Success has effectively avoided the fate of many a short-term experimental project in which superficial acceptance is discontinued once funding ceases.

Project Success is a program worthy of replication. Most good teachers have learned that one of the keys to success is to ignore the inappropriate and to praise the appropriate. When we can bring ourselves to systematically do so, we at least have happier learning environmentts, and some of us believe the children learn more.

Atlanta

I. Behavioral Modification

Atthowe, J. M., Jr. & Krasner, L. "Preliminary Report on the Application of Contingent Reinforcement Procedures (token economy) on a 'Chronic' Psychiatric Ward." Journal of Abnormal Psychology, 1968, 73, 37-43.

Allyon, T., & Azrin, N.H. The Token-Economy: a Motivational System for Therapy and Rehabilitation. New York: Appleton-Century-Crofts, 1968.(b)

Ayllon, T. & Azrin, N.H."The Measurement and Reinforcement of Behavior of Psychotics." Journal of the Experimental Analysis of Behavior, 1965, 8, 357-383.

Baer, D. M., Peterson, R. F., &Sherman, J.A. "The Development of Imitation by Reinforcing Behavioral Similarity to a Model." Journal of the Experimental Analysis of Behavior, 1967, 10, 405-416.

Bandura, A., & Walters, R. Social Learning and Personality Development. New York: Holt, Rinehart, & Winston, 1963.

Bandura, A. Principles of Behavior Modification. New York: Holt , Rinehart Winston, 1969.

Barclay, R,, Jr."Effecting Behavior Change in the Elementary Classroom: An Exploratory Study." Journal of Counseling Psychology, 1967, 14, 240-247.

Barrish, H., Saunders, M., and Wolf, M.M. "Good Behavior Game: Effects of Individual Contingencies for Group Consequences on Disruptive Behavior in a Classroom." Journal of Applied Behavior Analysis. 2, 79-84.

Bijou, S. "Implications of Behavioral Science for Counseling and Guidance." In J.D. Krumboltz (Ed.), Revolution in Counseling. Boston: Houghton Mifflin Co., 1966, pp. 27-48.

Bijou, S.W., S.W., & Baer, D.M. Child Development. Vols.I & II. New York: Appleton-Century-Crofts, 1961.

Bijou, S. W. , & Baer, D. M. Child Development:. Readings in Experimental Analysis. New York: Appleton-Century-Crofts, 1967.

Bijou, S.W., Peterson, R.F., Harris, F.R., Allen, K.E., & Johnson, M. "Methodology for Experimental Studies of Young Children in Natural Settin The Psychological Record, 1969, 19, 177-210.

Birnbrauer, J.S., Wolf, M.M., Kidder, J.D., & Tague, C.E. "Classroom Behavior of Retarded Pupils with Token Reinforcement. Journal of Experimental Child Psychology, 1965, 2, 219-235.

Blackham, G.J. "Stategies for Change in the Child Client." Elementary School Guidance and Counseling, 1969, 3(March), 174-181.

Bloom, B.S. (Ed.) Taxonomy of Educational Objectives, the Classification of Educational Goals Handbook: Cognitive Domain. New York: David McKay Co, 1956.

Boren, J.J., & Colman, A.D, "Some Experiments on Reinforcement Principles Within a Psychiatric Ward for Onlinquent Soldiers." Journal of Applied Behavior Analysis, 1970, 3, 29-37.

Broden, M., Hall, R.V., Dunlap, A. & Clark, R. "Effects of Teacher Attention and Token Reinforcement System in a Junior High School Special Education Class." Exceptional Children, 1970,36, 341-349.

Buckley, N.K. & Walker, H. M. Modifying Classroom Behavior - a Manual of Procedure for Classroom Teachers. Champaign: Research Press.

Burchard, J.D. "Systematic Socialization: A Programmed Environment for the Habilitation of Antisocial Retardates." Psychological Record, 1967,11, 461-476.

Bushell, D., Wrobel, P.A. & Michaelis, M.L. "Applying Group Contingencies to the Classroom Study Behavior of Preschool Children." Journal of Applied Behavior Analysis, 1968, 1, 55-63.

Carlson, C.S., Arnold, C.R., Becker, W.C., and Madsen, C.H. "The Elimination of Tantrum Behavior of a Child in an Elementary Classroom."Behaviour Research and Therapy,1968,6, 117-119.

Catania, C. (Ed.) Contemporary Research in Operant Behavior. Glenview, Illinois: Scott, Foresman, 1968.

Clark, M., Lachowicz, J., & Wolf, M.M. "A Pilot Basic Education Program for School Dropouts Incorporating a Token Reinforcement System." Behavior Research and Therapy, 1968, 6, 183-188.

Cohen, H.L. "Educational Therapy." Arena, 1967, 82, 220-225.

Craig, H.B. & Holland, A.L. "Reinforcement of Visual Attending in Classrooms for Deaf Children." Journal of Applied Behavior Analysis,3,97-109.

Datta, L.E., Schaefer, E., & Davis, Z. "Sex and Scholastic Aptitude as Variables in Teachers' Ratings of the Adjustment and Classroom Behavior of Negro and Other Seventh Grade Students." Journal of Educational Psychology,1968, 59, 94-101.

Deibert, A.N. & Harmon, A.J. New Tools for Changing Behavior. Champaign, Research Press, 1970.

Fargo, G.A., Behrns, C. & Nolen, P. Behavior Modification in the Classroom. Belmont, Calif: Wadsworth Pub. Co., 1970.

Ferster, C. B., & Perrott, M.C. Behavior Principles. New York: New Century, 1968.

Graziano, A.M. Behavior Therapy with Children. Chicago: Aldine-Atherton, 1971.

Gronlund, N. Stating Behavioral Objectives for Classroom Instruction. Toronto: Macmillan, 1970.

Hall, R.V., Panyan, M., Rabon, D., and Broden, M. "Instructing Beginning Teachers in Reinforcement Procedures Which Improve Classroom Control." Journal of Applied Behavior Analysis, 1968, 1, 315-322.

Holland, J. G., & Skinner, B.F. The Analysis of Behavior. New York: McGraw-Hill, 1961.

Keller, F.S. Learning Reinforcement Theory. New York: Holt, Rinehart, & Winston, 1966.

Krasner, L., & Ullman, L. (Eds.) Research in Behavior Modification. New York: Holt, Rinehart, & Winston, 1965.

Krumboltz, J. (Ed.) Revolution in Counseling. Boston: Houghton-Mifflin, 1966.

Krumboltz, J., & Thoresen, C. Behavioral Counseling: Cases and Techniques New York: Holt, Rinehart, & Winston, 1969.

Leles, S. & Sernabei, R. Writing and Using Behavioral Objectives-- A Learning Packet for Teachers, Students and Administrators. Tuscaloosa: Drake & Son, 1969.

Madsen, C. K. & Madsen, C. H. Parents/Children/Discipline: A Positive Approach. Boston: Allyn & Bacon, 1970.

Madsen, C.H. & Madsen, C.K. Teaching/Discipline. Boston: Allyn & Bacon, I

Mager, R. F. Preparing Instructional Objectives. Palo Alto: Fearon Publishers, 1962.

Meyers, N. "Extinction Following Partial and Continuous Primary and Secondar Reinforcement." Journal of Experimental Psychology, 1960, 60, 172-179.

Meyers, N. A., Craig, C.J., and Meyers, J.L. "Secondary Reinforcement as a Function of Number of Reinforced Trials." Child Development, 1961, 32, 765-772.

Notterman, J. Behavior: A Systematic Approach. New York: Random House,

Notterman, J. Readings in Behavior. New York: Random House, 1970.

O'Leary, K.D., & Becker, W.C. "Behavioral Modification of an Adjustment Cl A Token Reinforcement Program." Exceptional Children, 1967, 33, 637-6

O'Leary, K. D., Becker, W. C., Evans, M. B. & Sandergras, R. A. "A Token Reinforcement Program in a Public School: A Replication and Systematic Analysis." Journal of Applied Behavior Analysis, 1969,2, 3-13.

O'Leary, K. D., & Drabman, R. "Token Reinforcement Programs in the Classroom: A Review. Psychological Bulletin, 1971.

Osipow, S. H., & Walsh, W.B. Behavior Change in Counseling. New York: Appleton-Century-Crofts, 1970.

Osipow, S.H., & Walsh, W.B. Strategies in Counseling for Behavior Change. New York: Appleton-Century-Crofts, 1970.

Patterson, G. R., & Gullion, M.E. Living with Children. Champaign: Research Press, 1968.

Reynolds, G. S. A Primer of Operant Conditioning. Glenview, Ill.: Scott, Foresman, 1968.

Riley, D. A. Discrimination Learning. Boston: Allyn & Bacon, 1968.

Rosenthal, R., & Rosnow, R. Artifacts in Behavioral Research. New York: Academic Press, 1969.

Skinner, B. F. Beyond Freedom and Dignity. New York: Alfred A. Knopf, 1971.

Skinner, B. F. Contingencies of Reinforcement. New York: Appleton-Century-Crofts, 1969.

Skinner, B. F. Cumulative Record: A Selection of Papers. New York: Appleton-Century-Crofts, 1972.

Skinner, B.F. Science and Human Behavior. New York: Free Press, 1953.

Smith, J. M., & Smith, D.E. Child Management, a Program for Parents and Teachers. Ann Arbor: Ann Arbor Publishers, 1966.

Smith, W. I., & Moore, J.W. Conditioning and Instrumental Learning. New York: McGraw-Hill, 1966.

Staats, A.W."Social Behaviorism, Human Motivation, and the Conditioning Therapies." In B. Maher (Ed.), Progress in Experimental Personality Research, Vol.5; New York: Academic Press, 1970. (a)

Staats, A.W., Minke, K.A., Finley, J.R., Wolf, M., & Brooks, L.O. "A Reinforcer System and Experimental Procedure for the Laboratory Study of Reading Acquisition." Child Development, 1967,35,209-231 (b)

Staats, A.W., Minke, K.A., Goodwin, W., & Landeen, J. "Cognitive Behavior Modification: "Motivated Learning" with Subprofessional Therapy-Technicians." Behaviour Research and Therapy, 1967,5, 283-299.

Staats, A. W., Staats, C. K., Schutz, R. E. & Wolf, M. M. "The Conditioning of Textural Responses Using "Extrinsic" Reinforcers." Journal of the Experimental Analysis of Behavior, 1962,5,33-40.

Stephens, T. M. Directive Teaching. Columbus: Charles E. Merrill, 1970.

Thomas, D. R., Becker, W. C., and Armstrong, M. "Production and Elimination of Disruptive Classroom Behavior by Systematically Varying Teacher's Behavior. Journal of Applied Behavior Analysis, 1968, 35-45.

Thomas, D. R., Becker, W. C., & Engelmann, Siefried. Teaching A Course in Applied Psychology. New York, 1968.

Ullman, L. P., & Krasner, L. (Eds.) Case Studies in Behavioral Modification. New York: Holt, Rinehart, and Winston, 1965.

Walker, E. Conditioning and Instrumental Learning. Belmont, Calif.: Brooks/Cole, 1967.

Wolf, M. M., Giles, D. K., & Hall, V. R. "Experiments with Token Reinforcement in a Remedial Classroom." Behavior Research and Therapy, 1968,6,51-64.

Wolpe, J. The Practice of Behavior Therapy. New York: Pergamon Press, 1969.

Wolpe, J., & Lazarus, A. Behavior Therapy Techniques. New York: Pergamon Press, 1966.

Wolpe, J., Salter, A., & Reyna, L. J. The Conditioning Therapies. New York: Holt, Rinehart, & Winston, 1964.

Woody, R. H. Behavioral Problem Children in the School. New York: Appleton-Century-Crofts, 1969.

Yates, A. J. Behavior Therapy. New York: John Wiley & Sons, 1970.

Zimmerman, E. H., and Zimmerman, J. "The Alteration of Behavior in a Special Classroom Situation." Journal of the Experimental Analysis of Behavior, 1962,5,59-60.

Zimmerman, E. H., Zimmerman, J., & Russell, C.D. "Differential Effects of Token Reinforcement on Instruction- Following Behavior in Retarded Students Instructed as a Group." Journal of Applied Behavior Analysis, 1969,2, 101-112.

II. Public Documents

Atlanta Public Schools. Project Success Environment - Success-O-Gram. Atlanta, Georgia: Georgia Department of Education, October, 1970; January, 1971; March, 1971; April, 1971.

Atlanta Public Schools. Project Success Environment - The Child Succeed in School. Atlanta, Georgia: Georgia Department of Education, 1971

Brassell, William R., Jr. Application of Continuation Grant - The Succes Environment: An Approach to Community Educational Improvement. Atlanta, Georgia: Georgia Department of Education, April, 1972.

Brassell, William R., Jr. and Moore, Thomas Carl. End - of - Budget Period Report - The Success Environment: An Approach to Community Educational Improvement. Atlanta, Georgia: Georgia Department of Education, Vol. I, August, 1971.

Brown, James Cooper. End- of - Budget Period Report - Effects of Token Reinforcement Administered By Peer Tutors on Pupil Reading Achievem Tutor Collateral Behavior. Atlanta, Georgia: Georgia Department of Education, Vol. II, 1971.